

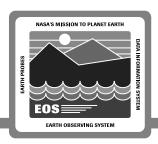
Ir1 EDF I&T Process Overview

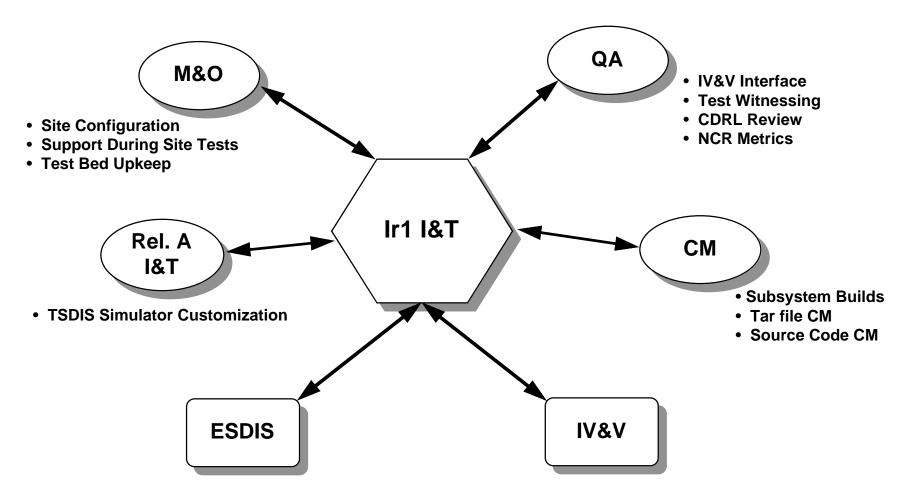
Gil Tadmor

gtadmor@eos.hitc.com

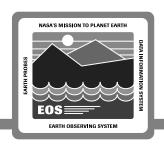
31 January 1996

Ir1 I&T Interactions



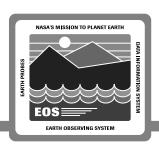


Ir1 I&T CDRLs



- DID 322/414 Ir1 Test Plans and Procedures (12/7/95 FINAL)
- DID 324/405 Ir1 Test Report (by end of January 96)
 - will include site test results
 - will capture deviations and updates to procedures from Final 322/414
 - see outline below

Ir1 Test Report DID 324/405 Table of Contents



- 1.0 Introduction
- 2.0 Related Documentation
- 3.0 Ir1 Integration and Test Results
- 3.1 Thread/Build Name
- 3.1.1 Test Case Name (TC_ID)
- **3.1.1.1 Test Summary**
 - objectives (Overall/Met/Unmet)
- 3.1.1.2 Deviations (if applicable)
 - redlined procedures accompanied with rationale/reason for deviation
 - design/concept/configuration/operations changes
 - reasons for not fulfilling test

Ir1 Test Report DID 324/405 Table of Contents (cont.)



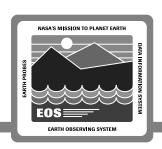
3.1.1.3 Test Results

- Logs and env script
- Output Data (files, screen displays, etc.) and/or Event Log dumps
- Identification of any system behavioral abnormalities

3.1.1.4 Recommendations and Conclusions

- overall test Pass/Fail analysis and conclusions
- specify additional tests if required to fulfill objectives (i.e., unsatisfied objectives if applicable)
- feature, component or subsystem redesign (if applicable)
- req't revision(s) (if applicable)
- change(s) in development or I&T process (if applicable)

Ir1 Test Report DID 324/405 Table of Contents (cont.)



- 4.0 Ir1 Site Test Reports
- 4.1 GSFC DAAC
- 4.2 LaRC DAAC
- 4.3 EDC DAAC

Appendix A. Requirement Verification Status

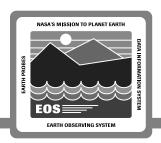
Appendix B. Misc Charts:

- CM of tar files
- req't verification status check-off process

Appendix C. Hardware and COTS Configurations

Appendix D. Summary Test Results Table

Ir1 M&O CDRLs

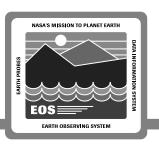


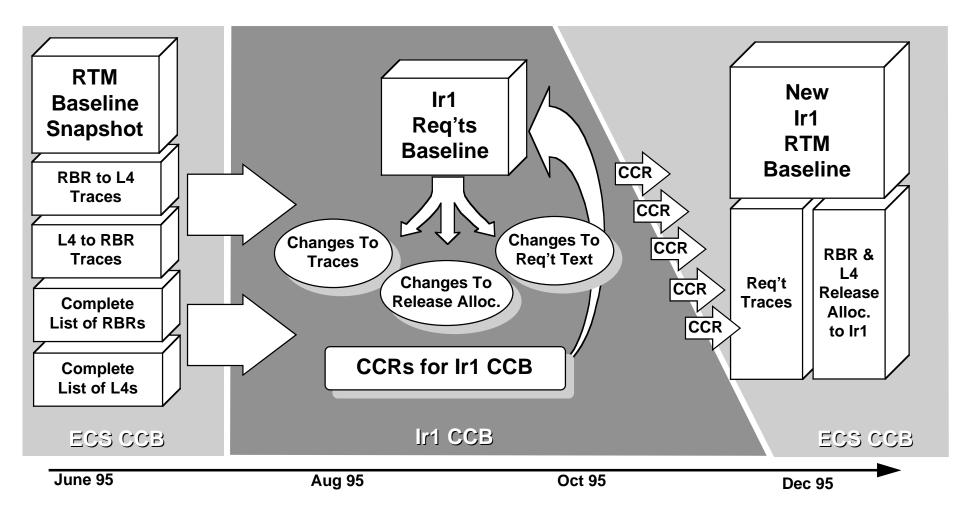
- DID 609 Maintenance and Ops Procedures
- DID 611 Operator's Manuals

Other Ir1 Documentation

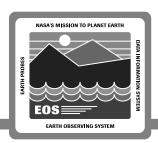
- Monthly NCR Reports (DID 521)
- Ir1 Version Description Document (VDD)
- Ir1 Mission Statement
- Design Inspections
- Code Inspections
- Developers Notebooks
- Ir1 Installation Plan 800-TP-001-001
- Ir1 to A Transition Paper
- Training Materials
- SSIT Procedures

ECS Ir1 Requirements Baseline





Ir1 I&T Verification Process



RBR to L4
Traces

L4 to RBR
Traces

Many-to-Many

- RTM database represents the Ir1 Req't Baseline as controlled through CCRs that have already been implemented, or that are pending approval / implementation into RTM
- Maintained through Ir1 and ECS CCBs and updated in RTM through ECS CCB
- RBR-L4 Traces have NO impact on the Ir1 Verification Process
- Clarification Text has NO impact on the Ir1 Verification Process

Complete
List of RBRs

Complete
List of L4s

- Maintained through Ir1 CCB
- Used to generate Test Cases and Procedures
- Many-to-Many relationship between req'ts and test cases
- Appendix C in DID 322/414 identifies these mappings
- DID 324/405 will redeliver this appendix with the verification status for each requirement

Integration Tests

Unit Level Tests

Ιν&ν

∕ Site \ Acceptance

Tests

System Tests

ECS

EDF

(use of Simulators)

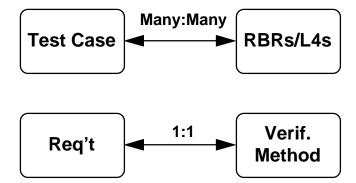
Coders

L4s

Ir1 I&T Verification Process (Cont.)



DID 322/414 Appendix C



Test_ID	Req't_ID		
1	xxx		

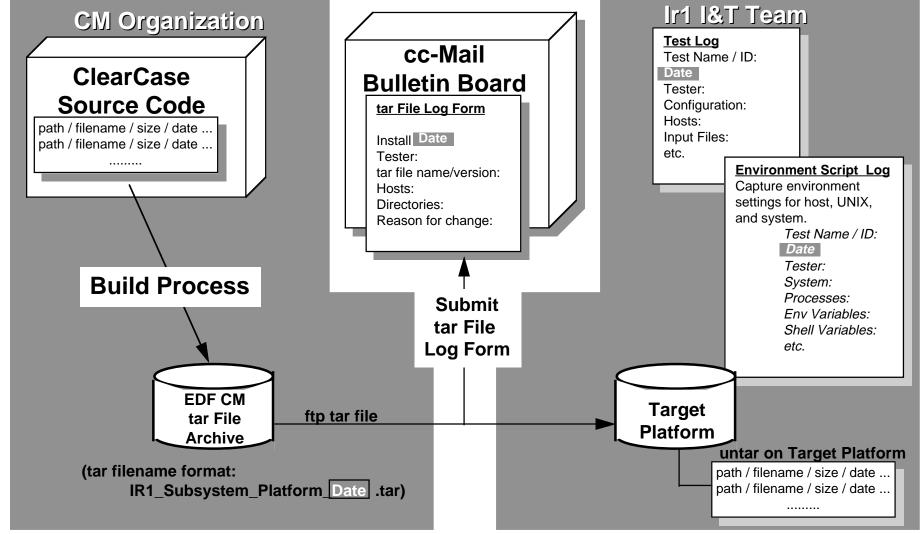
Step 1: Run Test #1 and verify req'ts mapped to it.

Step 2: Check the reverse mapping and make sure all tests have verified a particular req't before it is labeled as verified (RTM input).

Req't_ID	Verif_Method	text	Test_ID	Verif. Status
xxxx	Test		1 1 2 3	Unverified

EDF CM During I&T (pre-CSR)



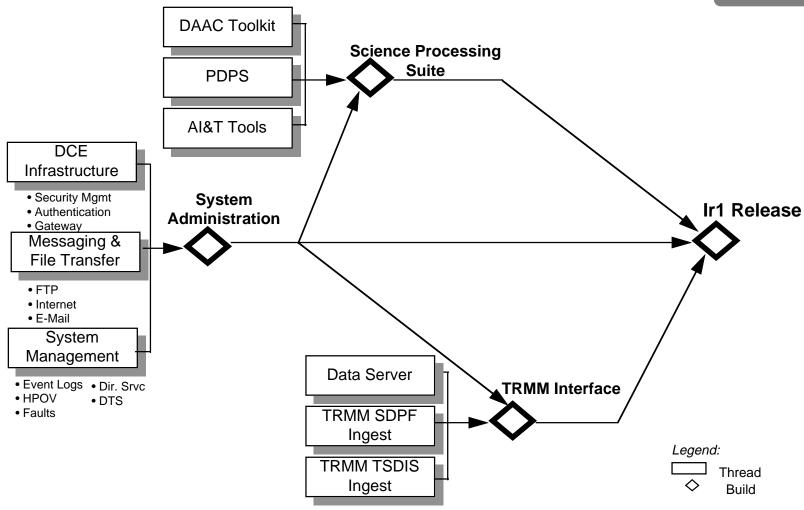


732-PP-001-001

GT1-11

Ir1 Build/Thread





732-PP-001-001 GT1-12